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PATENT

Appl. No. 10/678,765  
Amdt. dated August 20, 2007  
Amendment under 37 CFR 1.116 Expedited Procedure  
Examining Group 1632

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1-30. (canceled)

31. (currently amended) A method of screening an agent for toxic activity and a ~~desired~~ therapeutic activity *in vivo* comprising

administering the agent to a teleost *in vivo*;

detecting *in vitro* or *in situ* a change ~~*in-vitro* or *in-situ*~~ in expression of a protein or mRNA in a specific organ or tissue of the teleost responsive to the agent relative to the expression of the protein or mRNA in the specific organ or tissue of a teleost to which the agent has not been administered, the change in expression ~~in the teleost~~ indicating toxic activity in at least one tissue or organ of the teleost administered the agent; and

assessing whether the agent is effective to promote the ~~desired~~ therapeutic activity in the teleost.

32. (canceled)

33. (currently amended) The method of claim 31, wherein the change response in the teleost indicating toxic activity is detected in at least two tissues, at least two organs, or at least one tissue and one organ simultaneously.

34. (canceled)

35. (currently amended) The method of claim 31, ~~further comprising~~ administering wherein the agent is administered to at least two teleosts and ~~detecting~~ a response is detected indicating toxic activity in each of said at least two teleosts simultaneously.

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36. (previously presented) The method of claim 35, wherein each of said at least two teleosts is contained in a well of a multi-well plate.

37. (previously presented) The method of claim 36, wherein the wells of the multi-well plate have a volume of 300 microliters or smaller per well.

38. (previously presented) The method of claim 36, wherein the wells contain the teleosts in a volume of 50-200 microliters per well.

39. (new) The method of claim 31, wherein the teleost is contained within a well of a multiwell plate having a volume of 300 microliters or smaller.

40. (new) The method of claim 31, wherein the teleost is contained within a well of a multiwell plate in a volume of 50-200 microliters.

41. (new) A method of screening an agent for toxic activity *in vivo* comprising  
administering the agent to culture media containing a teleost with a chorion *in vivo* whereby the agent permeates the teleost;  
detecting *in vitro* or *in situ* a change in expression of a protein or mRNA in a specific organ or tissue of the teleost responsive to the agent relative to the expression of the protein or mRNA in the specific organ or tissue of a teleost to which the agent has not been administered, the change in expression indicating toxic activity in at least one tissue or organ of the teleost administered the agent.